

WHAT IS CLAIMED IS:

1. A character recognition apparatus comprising:

first recognition means appropriate to character recognition of a character image in a first language;

5 second recognition means appropriate to character recognition of a character image in a second language;

and

re-recognition range setting means for setting a re-recognition range in the result of character

10 recognition of plural character images included in a document image by using said first recognition means, for re-recognition by using said second recognition means, based on the result of recognition of an adjacent character image to a character image recognized by said  
15 first recognition means as said second language.

2. The character recognition apparatus according to claim 1, wherein if the adjacent character image to said re-recognition range is in said second language, said

20 re-recognition range setting means expands said re-recognition range to said adjacent character.

3. The character recognition apparatus according to claim 1, wherein if a similarity in the result of

25 recognition of the adjacent character image to said re-recognition range by said first recognition means is equal to or less than a predetermined value, said re-

recognition range setting means expands said re-recognition range to said adjacent character.

4. The character recognition apparatus according to  
5 claim 1, wherein if a similarity in the result of  
recognition of a character in said re-recognition range  
by said first recognition means is equal to or less than  
a predetermined value, said re-recognition range setting  
means determines said re-recognition range as a range  
10 for re-recognition, while if the similarity is greater  
than the predetermined value, said re-recognition range  
setting means excludes said re-recognition range from  
the range for re-recognition.

15 5. The character recognition apparatus according to  
claim 1, further comprising recognition result selection  
means for selecting the result of recognition by said  
first recognition means or the result of recognition by  
said second recognition means.

20

6. The character recognition apparatus according to  
claim 5, wherein if a similarity in the result of  
recognition of a character in said re-recognition range  
by said second recognition means is equal to or less  
25 than a predetermined value, said recognition result  
selection means selects the result of recognition by  
said first recognition means, while if said similarity

is greater than the predetermined value, selects the result of recognition by said second recognition means.

7. The character recognition apparatus according to  
5 claim 5, wherein if an average value of similarities in the result of recognition of characters in said re-recognition range by said second recognition means is equal to or less than a predetermined value, said recognition result selection means selects the result of  
10 recognition by said first recognition means, while if said average value is greater than the predetermined value, selects the result of recognition by said second recognition means.

15 8. The character recognition apparatus according to claim 5, wherein said recognition result selection means compares an average value of similarities in the result of recognition by said first recognition means with an average value of similarities in the result of  
20 recognition by said second recognition means, and if the average value of similarities in the result of recognition by said first recognition means is equal to or less than the average value of similarities in the results of recognition by said second recognition means,  
25 said recognition result selection means selects the result of recognition by said first recognition means, while if the average value of similarities in the result

of recognition by said first recognition means is greater than the average value of similarities in the result of recognition by said second recognition means, said recognition result selection means selects the  
5 result of recognition by said second recognition means.

9. The character recognition apparatus according to claim 1, further comprising:

reception means for receiving said document image  
10 from an external apparatus via a network; and  
transmission means for transmitting the result of character recognition using said first recognition means, said second recognition means and said re-recognition range setting means, to said external apparatus.

15

10. A character recognition method comprising the steps of:

performing character recognition on plural character images included in a document image, using a  
20 first recognition procedure appropriate to character recognition of a character image in a first language;  
setting a re-recognition range for performing re-recognition using a second recognition procedure appropriate to character recognition of a character  
25 image in a second language, based on the result of recognition of an adjacent character image to a

character image recognized by said first recognition procedure as said second language; and

performing re-recognition on the set re-recognition range, using said second recognition  
5 procedure.

11. Computer-executable software code, the code for character recognition, the code comprising:

code for performing character recognition on  
10 plural character images included in a document image, using a first recognition procedure appropriate to character recognition of a character image in a first language;

code for setting a re-recognition range for  
15 performing re-recognition using a second recognition procedure appropriate to character recognition of a character image in a second language, based on the result of recognition of an adjacent character image to a character image recognized by said first recognition  
20 procedure as said second language; and

code for performing re-recognition on the set re-recognition range, using said second recognition procedure.

25 12. A programmed computer for character recognition, comprising:

a memory having at least one region for storing computer-executable program code; and

a processor for executing the program code stored in said memory,

5        wherein the program code includes:

code for performing character recognition on plural character images included in a document image, using a first recognition procedure appropriate to character recognition of a character image in a first

10    language;

code for setting a re-recognition range for performing re-recognition using a second recognition procedure appropriate to character recognition of a character image in a second language, based on the

15    result of recognition of an adjacent character image to a character image recognized by said first recognition procedure as said second language; and

code for performing re-recognition on the set re-recognition range, using said second recognition

20    procedure.

13. A computer-readable medium having computer-executable software code stored thereon, the code for character recognition, the code comprising:

25        code for performing character recognition on plural character images included in a document image, using a first recognition procedure appropriate to

character recognition of a character image in a first language;

- code for setting a re-recognition range for performing re-recognition using a second recognition
- 5 procedure appropriate to character recognition of a character image in a second language, based on the result of recognition of an adjacent character image to a character image recognized by said first recognition procedure as said second language; and
- 10 code for performing re-recognition on the set re-recognition range, using said second recognition procedure.